

Amendments to the Claims

1. (Currently Amended) In a computer system, a method of converting video data for a video image to a lower-precision representation for lower-precision processing of the video data, the method comprising:

receiving chroma and luma information for a pixel in the video image in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data per channel for the pixel comprising a most significant byte comprising 8 bits and a least significant byte comprising 8 bits, where the most significant byte in the 16-bit unit of data is an integer component comprising values each with a specific position relative to the 16-bit unit of data, and where the least significant byte in the 16-bit unit of data is a fractional component;

converting the n-bit representation to a lower-precision (n-m)-bit representation by splitting the fractional component into a first portion comprising m least significant bits of the fractional component wherein m is less than 8, and further splitting the fractional component into a second portion comprising 8-m most significant bits of the fractional component, and assigning zero values to one or more least significant bits in the first portion of the fractional component while the values and the specific positions of the values of the integer component and the second portion of the fractional component are unchanged; and

outputting a result of the converting.

2. (Currently Amended) The method of claim 1 wherein the n-bit representation is a 16-bit representation and the lower-precision (n-m)-bit representation is a 10-bit representation.

3. (Canceled)

4. (Original) The method of claim 1 wherein the chroma information is sampled at a resolution less than the luma information.

5.-34. (Canceled)

35. (Currently Amended) The method of claim 1 3 wherein the n-bit representation is a 16-bit representation, and wherein the (n-m)-bit representation is a 10-bit representation.

36. (Currently Amended) The method of claim 1 3 further comprising processing data in the (n-m)-bit representation using (n-m)-bit hardware.

37. (Previously Presented) The method of claim 36 wherein the (n-m)-bit hardware comprises a 10-bit processor.

38. (Currently Amended) The method of claim 1 3 wherein the n-bit representation and the (n-m)-bit representation are associated with different FOURCC codes.

39. (Previously Presented) The method of claim 1 wherein one or more alpha values are associated with the video image.

40. (Currently Amended) A computer system comprising:

means for receiving chroma and luma information for at least one pixel in a video image, the chroma and luma information in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data per channel for the pixel comprising a most significant byte comprising 8 bits and a least significant byte comprising 8 bits, where the most significant byte in the 16-bit unit of data is an integer component comprising values each with a specific position relative to the 16-bit unit of data, and where the least significant byte in the 16-bit unit of data is a fractional component;

means for converting the n-bit representation to a lower-precision (n-m-bit representation by splitting the fractional component into a first portion comprising m least significant bits of the fractional component wherein m is less than 8, and further splitting the fractional component into a second portion comprising 8-m most significant bits of the fractional component, and assigning zero values to one or more least significant bits in the first portion of the fractional component while the values and the specific positions of the values of the integer component and the second portion of the fractional component are unchanged; and

means for outputting a result of the converting.

41. (Currently Amended) The computer system of claim 40 wherein the n-bit representation is a 16-bit representation and the lower-precision (n-m)-bit representation is a 10-bit representation.

42.-43. (Canceled)

44. (Currently Amended) The computer system of claim 40 wherein the n-bit representation and the lower-precision (n-m)-bit representation are represented by different FOURCC codes.

45. (Canceled)

46. (Currently Amended) The computer system of claim 40 further comprising means for displaying the video image using the lower-precision (n-m)-bit representation.

47. (Currently Amended) The computer system of claim 40 wherein the n-bit representation and the lower-precision (n-m)-bit representation are most-significant-bit justified.

48. (Previously Presented) The computer system of claim 40 wherein the chroma information and the luma information are in a YUV color space.

49. (Currently Amended) The method of claim 1 wherein the n-bit representation and the lower-precision (n-m)-bit representation are most-significant-bit justified.

50. (Previously Presented) The method of claim 1 wherein the chroma information and the luma information are in a YUV color space.

51. (Currently Amended) One or more computer-readable storage media having computer-executable instructions stored thereon for causing a computer to perform a method comprising:

receiving chroma and luma information for a pixel in the video image in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data per channel for the pixel comprising a most significant byte comprising 8 bits and a least significant byte comprising 8 bits, where the most significant byte in the 16-bit unit of data is an integer component comprising values each with a specific position relative to the 16-bit unit of data, and where the least significant byte in the 16-bit unit of data is a fractional component;

converting the n-bit representation to a lower-precision (n-m)-bit representation by splitting the fractional component into a first portion comprising m least significant bits of the fractional component wherein m is less than 8, and further splitting the fractional component into a second portion comprising 8-m most significant bits of the fractional component, and assigning zero values to one or more least significant bits in the first portion of the fractional component while the values and the specific positions of the values of the integer component and the second portion of the fractional component are unchanged; and outputting a result of the converting.

52. (Currently Amended) The computer-readable storage media of claim 51 wherein the n-bit representation is a 16-bit representation and the lower-precision (n-m)-bit representation is a 10-bit representation.

53. (Currently Amended) The computer-readable storage media of claim 51 wherein the n-bit representation and the lower-precision (n-m)-bit representation are most-significant-bit justified.